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NEWS
NEWS
                 "Ask CAS" for self-help around the clock
NEWS
     3 DEC 23
                New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                USPAT2
NEWS
        JAN 13
                 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 5
        JAN 13
                New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
NEWS 6
        JAN 17
                 Pre-1988 INPI data added to MARPAT
NEWS
        JAN 17
                 IPC 8 in the WPI family of databases including WPIFV
NEWS 8
        JAN 30
                Saved answer limit increased
NEWS 9
        FEB 21
                STN AnaVist, Version 1.1, lets you share your STN AnaVist
                visualization results
        FEB 22
                The IPC thesaurus added to additional patent databases on STN
NEWS 10
NEWS 11
        FEB 22
                Updates in EPFULL; IPC 8 enhancements added
NEWS 12 FEB 27
                New STN AnaVist pricing effective March 1, 2006
                MEDLINE/LMEDLINE reload improves functionality
NEWS 13 FEB 28
                TOXCENTER reloaded with enhancements
NEWS 14
        FEB 28
                REGISTRY/ZREGISTRY enhanced with more experimental spectral
NEWS 15 FEB 28
                property data
NEWS 16 MAR 01
                INSPEC reloaded and enhanced
                Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 17
        MAR 03
NEWS 18 MAR 08
                X.25 communication option no longer available after June 2006
NEWS 19 MAR 22
                EMBASE is now updated on a daily basis
                New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 20 APR 03
NEWS 21 APR 03
                Bibliographic data updates resume; new IPC 8 fields and IPC
                 thesaurus added in PCTFULL
```

NEWS 22 APR 04 STN AnaVist \$500 visualization usage credit offered

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
http://download.cas.org/express/v8.0-Discover/

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FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

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FILE COVERS 1907 - 11 Apr 2006 VOL 144 ISS 16 FILE LAST UPDATED: 10 Apr 2006 (20060410/ED)

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http://www.cas.org/infopolicy.html

=> s us 2004-0175368/pn 1 US 2004-0175368/PN (US2004175368/PN)

=> sel rn E1 THROUGH E4 ASSIGNED

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 2.49 2.70

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STRUCTURE FILE UPDATES: 9 APR 2006 HIGHEST RN 879846-78-3 DICTIONARY FILE UPDATES: 9 APR 2006 HIGHEST RN 879846-78-3

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

^{*} The CA roles and document type information have been removed from *

^{*} the IDE default display format and the ED field has been added,

^{*} effective March 20, 2005. A new display format, IDERL, is now

```
* available and contains the CA role and document type information. *
*******************
Structure search iteration limits have been increased. See HELP SLIMITS
for details.
REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:
http://www.cas.org/ONLINE/UG/regprops.html
=> s e1-e4
             1 2185-86-6/BI
                 (2185-86-6/RN)
             1 2390-59-2/BI
                 (2390-59-2/RN)
            1 2390-60-5/BI
                 (2390-60-5/RN)
             1 548-62-9/BI
                 (548-62-9/RN)
L2
             4 (2185-86-6/BI OR 2390-59-2/BI OR 2390-60-5/BI OR 548-62-9/BI)
=> d 1-4
    ANSWER 1 OF 4 REGISTRY COPYRIGHT 2006 ACS on STN
L2
RN
     2390-60-5 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
    Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-
     naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, chloride
     (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    C.I. Basic Blue 7 (7CI, 8CI)
CN
CN
    Victoria Pure Blue BO (6CI)
OTHER NAMES:
    Aizen Victoria Blue BO
CN
    Aizen Victoria Pure Blue BOH
CN
    Basic Blue 7
CN
    Basic Brilliant Blue BO
CN
    Basonyl Blue 636
CN
CN
    Brilliant Victoria Blue RB
    Brilliant Victoria Blue RS
CN
    C.I. 42595
CN
    Calcozine Pure Blue BO
CN
    Eljon Blue Toner
CN
    Hidaco Victoria Blue BGO
CN
    Mitsui Victoria Pure Blue BO
CN
CN
    No. 3772 Forthbrite Blue B
    Sicilian Blue X 2758
CN
    Silosuper Blue B
CN
    Vali Fast Blue 1603
CN
    Victoria Blue BO
CN
    Victoria Blue BOH
CN
    Victoria Blue BON 110
CN
    Victoria Blue FBO
CN
    Victoria Blue, Green Shade
CN
CN
    Victoria Pure Blue BGO
CN
    Victoria Pure Blue BO CI 42595
    Victoria Pure Blue BOC
CN
CN
    Victoria Pure Blue BOD
CN
    Victoria Pure Blue BOH
CN
    Victoria Pure Blue BON
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CN

Victoria Pure Blue BOP

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CN
    Victoria Pure Blue FBO
CN
    Victoria Pure Blue RB
CN
     Victoria Pure Ink Blue BO
CN
     Victoria Pure Lake Blue
     Victoria Pure Lake Blue BO
CN
DR
     54066-28-3, 57657-49-5, 51938-69-3, 72175-85-0, 213762-89-1
MF
     C33 H40 N3 . Cl
CI
     COM
LC
     STN Files:
                  BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, DDFU,
       DRUGU, IFICDB, IFIPAT, IFIUDB, MEDLINE, SPECINFO, TOXCENTER, USPAT2,
       USPATFULL
     Other Sources:
                      DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
CRN
    (36396-19-7)
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● cl -

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
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444 REFERENCES IN FILE CA (1907 TO DATE)
              12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             445 REFERENCES IN FILE CAPLUS (1907 TO DATE)
              11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
    ANSWER 2 OF 4 REGISTRY COPYRIGHT 2006 ACS on STN
1.2
    2390-59-2 REGISTRY
RN
    Entered STN: 16 Nov 1984
ED
    Ethanaminium, N-[4-[bis[4-(diethylamino)phenyl]methylene]-2,5-
CN
    cyclohexadien-1-ylidene]-N-ethyl-, chloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    C.I. Basic Violet 4 (7CI, 8CI)
CN
CN
    Ethyl violet (6CI)
OTHER NAMES:
    Basic Violet 4
CN
CN
    C.I. 42600
CN
    Ethyl crystal violet
    Ethyl Violet AX
CN
CN
    Ethyl Violet GGA
CN
    Lowacryl Violet 4
CN
    Shikiso Acid Brilliant Blue 6B
CN
     Tris(p-(diethylamino)phenyl)methylium chloride
    C31 H42 N3 . Cl
MF
CI
    COM
LC
    STN Files:
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS,
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CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, NIOSHTIC, PIRA, RTECS*, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (47743-68-0)

● cl-

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

503 REFERENCES IN FILE CA (1907 TO DATE)

16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

503 REFERENCES IN FILE CAPLUS (1907 TO DATE)

27 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L2 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2006 ACS on STN

RN 2185-86-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN C.I. Basic Blue 11 (7CI, 8CI)

CN Victoria Blue R (6CI)

OTHER NAMES:

CN Aizen Victoria Blue BOH

CN Basic Blue 11

CN Basic Blue K

CN C.I. 44040

CN Hidaco Victoria Blue R

CN Victoria Blue RS

CN Victoria Lake Blue R

MF C29 H32 N3 . Cl

CI COM

LC STN Files: BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, IFICDB, IFIPAT, IFIUDB, MEDLINE, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**, NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

CRN (47700-00-5)

• c1 ~

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 132 REFERENCES IN FILE CA (1907 TO DATE)
 - 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 132 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 - 6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
- L2 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 548-62-9 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-

cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

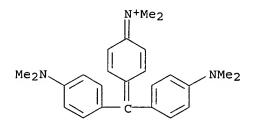
OTHER CA INDEX NAMES:

CN C.I. Basic Violet 3 (6CI, 8CI)

OTHER NAMES:

- CN 12416 Violet
- CN Adergon
- CN Aizen Crystal Violet
- CN Aizen Crystal Violet Extra Pure
- CN Aniline violet
- CN Aniline violet pyoktanine
- CN Atmonil.
- CN Avermin
- CN Axuris
- CN Badil
- CN Basic Violet 3
- CN Basic Violet BN
- CN Basonyl Violet 610
- CN C.I. 42555
- CN Calcozine Violet 6BN
- CN Calcozine Violet C
- CN crystal violet
- CN Crystal violet
- CN Crystal Violet 10B
- CN Crystal Violet 5BO
- CN Crystal Violet 6B
- CN Crystal Violet 6BO
- CN Crystal Violet AO
- CN Crystal Violet AON
- CN Crystal Violet BP
- CN Crystal Violet BPC
- CN Crystal Violet chloride
- CN Crystal Violet Extra Pure

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CN
     Crystal Violet Extra Pure APN
CN
     Crystal Violet Extra Pure APNX
CN
     Crystal Violet FN
CN
     Crystal Violet HL 2
CN
     Crystal Violet O
CN
     Crystal Violet Pure DSC
CN
     Crystal Violet Pure DSC Brilliant
CN
     Crystal Violet SS
CN
     Crystal Violet Technical
CN
     Crystal Violet USP
CN
     Gentersal
CN
     Gentian violet
CN
     Gentian Violet B
CN
     Gentiaverm
CN
     Genticid
CN
     Gentioletten
CN
     Hecto Violet R
CN
     Hectograph Violet SR
CN
     Hexamethyl violet
CN
     Hexamethyl-p-rosaniline chloride
CN
     Hexamethylpararosaniline chloride
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
DR
     7077-31-8, 23355-47-7
MF
     C25 H30 N3 . C1
CI
     COM
LC
     STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
       BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST,
       CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, HSDB*,
       IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC,
       PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, ULIDAT, USAN, USPAT2,
       USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
CRN
     (7438-46-2)
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• c1-

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4303 REFERENCES IN FILE CA (1907 TO DATE)
92 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4310 REFERENCES IN FILE CAPLUS (1907 TO DATE)
15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s 2390-59-2/rn or 548-62-9/rn 1 2390-59-2/RN 1 548-62-9/RN => file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 10.68 13.38

FULL ESTIMATED COST

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=> s 14 (L) (bone or leukenia or lymphoma or myeloma)

184547 BONE

1 LEUKENIA

33670 LYMPHOMA

17751 MYELOMA

5 L4 (L) (BONE OR LEUKENIA OR LYMPHOMA OR MYELOMA)

=> d 1-5 bib abs hitstr

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:820190 CAPLUS

DN 139:308653

L5

TI Nontoxic activator of radical polymerization for bone or dental cements

IN Mangou, Emmanuel; Pagnoux, Anne; Robin, Sophie; Dolatkhani, Marc; Deffieux, Alain

PA Polymerexpert SA, Fr.

SO Fr. Demande, 24 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

ΡI FR 2838334 A1 20031017 FR 2002-4710 20020416 WO 2003086327 A2 20031023 WO 2003-FR1211 20030416 WO 2003086327 A3 20040408 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003262135 A1 20031027 AU 2003-262135 20030416 PRAI FR 2002-4710 Α 20020416 WO 2003-FR1211 W 20030416 os MARPAT 139:308653 GI

AB R1R2NC6H4R3 (R1, R2 = alkyl, aryl, alkaryl, or alkylidene, R3 = ortho- or para-electron donor with mol. weight >150), [[CH(C6H4NR1R2-p)CH2]x(CHPhCH2)y]n (R1, R2 = alkyl, aryl, alkaryl, or alkylidene, x = 0.1-0.9, y = 0.1-0.9, n = 5-1000), or polymers I (R1, R2, R'3 = alkyl, aryl, alkaryl, or alkylidene) are useful as nontoxic activators for radical initiators in polymerization of bone or dental cements containing unsatd.

compds. A typical cement contained PMMA 63.18, BPO 0.76, ZrO2 6.51, Me methacrylate 25.15, Bu methacrylate 3.85, and Crystal Violet 0.55%.

IT 548-62-9, Crystal Violet

Ι

RL: CAT (Catalyst use); USES (Uses)
(nontoxic monomeric and polymeric aromatic tertiary amine activators of radical polymerization catalysts in bone or dental cements based on unsatd. compds.)

RN 548-62-9 CAPLUS

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:223125 CAPLUS

DN 133:28096

TI Effect of molecular structure on the performance of triarylmethane dyes as therapeutic agents for photochemical purging of autologous bone marrow grafts from residual tumor cells

AU Indig, Guilherme L.; Anderson, Gregory S.; Nichols, Michael G.; Bartlett, Jeremy A.; Mellon, William S.; Sieber, Fritz

CS School of Pharmacy, Division of Pharmaceutical Sciences, University of Wisconsin, Madison, WI, 53706, USA

SO Journal of Pharmaceutical Sciences (2000), 89(1), 88-99 CODEN: JPMSAE; ISSN: 0022-3549

PB Wiley-Liss, Inc.

DT Journal

LA English

Extensively conjugated cationic mols. with appropriate structural features AB naturally accumulate into the mitochondria of living cells, a phenomenon typically more prominent in tumor than in normal cells. Because a variety of tumor cells also retain pertinent cationic structures for longer periods of time compared with normal cells, mitochondrial targeting has been proposed as a selective therapeutic strategy of relevance for both chemotherapy and photochemotherapy of neoplastic diseases. Here we report that the triarylmethane dye crystal violet stains cell mitochondria with efficiency and selectivity, and is a promising candidate for photochemotherapy applications. Crystal violet exhibits pronounced phototoxicity toward L1210 leukemia cells but comparatively small toxic effects toward normal hematopoietic cells (murine granulocyte-macrophage progenitors, CFU-GM). On the basis of a comparative examination of chemical, photochem., and phototoxic properties of crystal violet and other triarylmethane dyes, we have identified interdependencies between mol. structure, and selective phototoxicity toward tumor cells. These structure-activity relationships represent useful guidelines for the development of novel purging protocols to promote selective elimination of residual tumor cells from autologous bone marrow grafts with min. toxicity to normal hematopoietic stem cells.

IT 548-62-9, Crystal violet 2390-59-2

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(mol. structure effect on triarylmethane dyes photochem. purging of autologous bone marrow grafts from residual tumor cells)

RN 548-62-9 CAPLUS

RN 2390-59-2 CAPLUS

CN Ethanaminium, N-[4-[bis[4-(diethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, chloride (9CI) (CA INDEX NAME)

● cl -

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1981:495976 CAPLUS

DN 95:95976

TI Tibial dyschondroplasia in broilers: comparison of dietary additives and strains

AU Veltmann, J. R., Jr.; Jensen, L. S.

CS Dep. Poult. Sci., Univ. Georgia, Athens, GA, 30602, USA

SO Poultry Science (1981), 60(7), 1473-8 CODEN: POSCAL; ISSN: 0032-5791

DT Journal

LA English

The effects of broiler strain and various additives to practical corn-soybean diets on the incidence of tibial dyschondroplasia (TD) were studied with broiler chicks maintained in battery brooders. No significant difference in the incidence of TD was found among the 9 broiler strains compared. Although the incidence of twisted legs was higher than TD among the 9 strains, there was no apparent correlation between the 2 leg disorders. Studies conducted with the following additives did not significantly increase the incidence of TD in broilers, when compared to controls: monensin [17090-79-8], NaCl, CuSO4, MgSO4, K2SO4, roxarsone [121-19-7], gentian violet [548-62-9], erythromycin [114-07-8], vitamin K [12001-79-5], or vitamin D3 [67-97-0]. However, dietary NH4Cl (1.5 or 30%) did increase the incidence of TD, and adding various fermentation products at 10 and 20% either in the absence or presence of

NH4Cl failed to reduce the incidence of the disease. The incidences of TD among broiler chicks fed high dietary F- were nonsignificant; no evidence of the disease was found in Leghorn chicks fed the same diets. Chicks maintained in battery brooders in these studies generally had a lower incidence of TD than that reported for com. flocks in the field. Furthermore, manipulation of feed additives or ingredients in practical rations for broiler chickens did not increase the incidence of the disease.

IT 548-62-9

RL: BIOL (Biological study)

(bone dyschondroplasia of chicks in relation to dietary)

RN 548-62-9 CAPLUS

● C1 -

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1979:179955 CAPLUS

DN 90:179955

TI Further study of the genetic toxicity of gentian violet

AU Au, William; Butler, Mary Ann; Bloom, Stephen E.; Matney, Thomas S.

CS M. D. Anderson Hosp., Univ. Texas, Houston, TX, USA

SO Mutation Research (1979), 66(2), 103-12

CODEN: MUREAV; ISSN: 0027-5107

DT Journal

LA English

GI

$$\begin{bmatrix} Me_2N & C1 \end{bmatrix}$$

AB Gentian violet (I) [548-62-9] was toxic but not mutagenic in the Ames assay. However, it was active in the Rosenkranz assay causing reparable DNA damage. The presence of rat liver S-9 in the in vitro cytogenetic assay and in the bacterial assays showed that the activity of I could be reduced or eliminated. In the in vivo assays, I was not clastogenic and failed to induce sister chromatid exchanges. However, I proved to be highly toxic to growing chick embryos at high dosage and depressed mitotic activities in mouse bone marrow after prolonged treatment. I can be inactivated by the liver detoxification system. However, it is potentially hazardous to cells that are exposed to the dye directly (e.g. skin epithelium and cell lining of the gastrointestinal tract).

L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1968:457072 CAPLUS

DN 69:57072

TI Diffusion of some cationic and anionic dyes through mandibular disk and cartilage in vitro

AU Bergman, Bo

CS Univ. Umea, Umea, Swed.

SO Acta Odontologica Scandinavica (1968), 26(2), 103-10 CODEN: AOSCAQ; ISSN: 0001-6357

DT Journal

LA English

AB The diffusion of some cationic and anionic dyes through the mandibular articular disks, the menisci of the knee joint, and costal, nasal, and tracheal cartilage was studied. The four cationic dyes tested diffused throughout all the disks and cartilages but only partial diffusion was

noted in some of the menisci. Of the 3 anionic dyes tested, Congo red and Evans blue did not diffuse into any of the samples whereas methyl orange did so throughout all samples. Dyes that diffused throughout the cartilages were the same ones that diffused through a dialysis membrane in 48 hrs. The results of the study seem to indicate the possibility of simple diffusion of some of the dyes tested through the tissue under study which seemed to act as selective membranes permeable to colored particles up to a certain size, regardless of their net charge.

IT 548-62-9

RL: PEP (Physical, engineering or chemical process); PROC (Process) (diffusion of, in bone and cartilage)

RN 548-62-9 CAPLUS

'CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY 42.46	SESSION 55.84
		00.01
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-3.75	-3.75

STN INTERNATIONAL LOGOFF AT 07:16:25 ON 11 APR 2006

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LOGINID:ssptamxg1614

TERMINAL (ENTER 1, 2, 3, OR ?):2

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                 "Ask CAS" for self-help around the clock
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         DEC 23
                 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
NEWS 4
         JAN 13
                 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 5
         JAN 13
                 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                 INPADOC
NEWS
         JAN 17
                 Pre-1988 INPI data added to MARPAT
NEWS
         JAN 17
     7
                 IPC 8 in the WPI family of databases including WPIFV
NEWS 8
         JAN 30
                 Saved answer limit increased
         FEB 21
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                 STN AnaVist, Version 1.1, lets you share your STN AnaVist
                 visualization results
NEWS 10 FEB 22
                 The IPC thesaurus added to additional patent databases on STN
NEWS 11 FEB 22
                 Updates in EPFULL; IPC 8 enhancements added
NEWS 12 FEB 27
                 New STN AnaVist pricing effective March 1, 2006
                 MEDLINE/LMEDLINE reload improves functionality
NEWS 13 FEB 28
NEWS 14 FEB 28
                 TOXCENTER reloaded with enhancements
NEWS 15 FEB 28
                REGISTRY/ZREGISTRY enhanced with more experimental spectral
                 property data
NEWS 16 MAR 01
                 INSPEC reloaded and enhanced
                 Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 17
        MAR 03
NEWS 18 MAR 08
                 X.25 communication option no longer available after June 2006
NEWS 19 MAR 22
                 EMBASE is now updated on a daily basis
NEWS 20 APR 03
                 New IPC 8 fields and IPC thesaurus added to PATDPAFULL
NEWS 21 APR 03
                 Bibliographic data updates resume; new IPC 8 fields and IPC
                 thesaurus added in PCTFULL
                 STN AnaVist $500 visualization usage credit offered
NEWS 22 APR 04
        APR 12
NEWS 23
                 LINSPEC, learning database for INSPEC, reloaded and enhanced
NEWS 24
        APR 12
                 Improved structure highlighting in FQHIT and QHIT display
                 in MARPAT
NEWS 25 APR 12
                Derwent World Patents Index to be reloaded and enhanced during
                 second quarter; strategies may be affected
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              AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
              V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
              http://download.cas.org/express/v8.0-Discover/
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L2 9 L1 AND PHOTOACTIV?

=> d 1-9 bib abs

L2 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:491623 CAPLUS

DN 143:202771

TI Heterogeneous photocatalytic decomposition of Crystal Violet in UV-illuminated sol-gel derived nanocrystalline TiO2 suspensions

AU Senthilkumaar, S.; Porkodi, K.

CS Faculty of Engineering, Department of Chemistry, PSG College of Technology, Coimbatore, 641004, India

SO Journal of Colloid and Interface Science (2005), 288(1), 184-189 CODEN: JCISA5; ISSN: 0021-9797

PB Elsevier

DT Journal

LA English

AB Nanostructured TiO2 ultrafine powder (Ti-SG) 100% anatase phase prepared by the sol-gel method was used as a photocatalyst in the decomposition reaction of a basic dye, Crystal Violet (hexamethyl-p-rosaniline chloride), in water under UV light irradiation Optimization of the photocatalyst's performance as a function of irradiation time, catalyst concentration, and solution pH was performed.

The **photoactivity** was greatly dependent on the solution pH and it was effective for Crystal Violet to be degraded under basic conditions. The extent of photooxidn. or -reduction of CV was discussed in terms of the

Langmuir-Hinshelwood model. Results also indicated that the proper addition of H2O2 could improve the degradation rate, but excess H2O2 quenched the formation of OH•. Textural and photocatalytic characteristics of sol-gel derived TiO2 (Ti-SG) were compared with those of com. P25, TiO2. The relative photonic efficiency of sol-gel derived TiO2 was found to be 2.77 with reference to phenol.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:548708 CAPLUS

DN 133:170235

TI Positive photoresist with improved contrast ratio and photospeed

IN McMurdie, Neil D.

PA PPG Industries Ohio, Inc., USA

SO U.S., 7 pp. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| 1111.01.1 | | | | |
|----------------------|------|----------|-----------------|----------|
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
| | | | | |
| PI US 6100008 | Α | 20000808 | US 1998-152776 | 19980914 |
| PRAI US 1997-58821P | P | 19970915 | | |
| OS MARPAT 133:170235 | | | | |
| CT | | | | |

$$YCH_2$$
 CH_2X NO_2 I

$$VCH_2$$
 CH_2X O_2N II

The present invention is a pos. acting photoresist composition which includes a pos. acting photoactive component and a di-Me aniline component. The pos. acting photoactive component includes at least one pos. acting photoactive polymeric compound The photoactive polymeric compound contains groups having the 2,6-dinitro structure I or a 2,5-dinitro structure II (X and Y = halogen, -OR, -O-SO2R, -SR, -NRR', -OC:ONHR, -OC:OOR, -OSiRR'O and -OC:OR; and R and R' = hydrogen or any of a wide variety of organic substituents, including substituted or unsubstituted alkyl, aryl, substituents). The photoactive component may also include a photoactive monomeric compound which contains groups having the 2,6-dinitro structure I and/or the 2,5-dinitro structure II set out above. The di-Me aniline component includes a N,N-di-Me aniline compound

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- AN 1995:637702 CAPLUS
- DN 123:56788
- TI Grafting reactions onto poly(organophosphazenes). IV. Light-induced graft copolymerization of organic polymers containing free or basic functionalities onto poly[bis(4-benzylphenoxy)phosphazene]
- AU Minto, Francesco; Gleria, Mario; Bortolus, Pietro; Fambri, Luca; Pegoretti, Alessandro
- CS Istituto Fotochimica Radiazioni d'Alta Energia, Consiglio Nazionale Delle Ricerche, Legnaro, 35020, Italy
- SO Journal of Applied Polymer Science (1995), 56(6), 747-56 CODEN: JAPNAB; ISSN: 0021-8995
- PB Wiley
- DT Journal
- LA English
- AB The light-induced graft copolymn. of acrylic acid, methacrylic acid, and 4-vinylpyridine onto poly[bis(4-benzylphenoxy)phosphazene] films to prepare new grafted phosphazene copolymers containing acid and basic functionalities is reported. The process was carried out in monomer/methanol mixts. in the presence of benzophenone or benzoin Et ether as photosensitizers by selective excitation of these last species. The yield of the grafting processes was evaluated as a function of the monomer concentration in the reaction medium, type of photoinitiator, and characteristics of the grafted organic monomers. The acid functions inserted in poly[bis(4-benzylphenoxy)phosphazene]-g-poly[(meth)acrylic acid] grafted copolymers, and the basic groups of the poly[bis(4benzylphenoxy)phosphazene]-g-poly(4-vinylpyridine) substrates were allowed to interact with basic and acid dyes, resp., to form permanently colored polymeric films. The photoactivity of these films as substrates for the photosensitized production of singlet oxygen was tested.
- L2 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1992:162578 CAPLUS
- DN 116:162578
- TI Photosensitive composition for lithographic plates
- IN Akyama, Takeo; Adachi, Yutaka; Nakai, Hideyuki; Sasaki, Mitsuru
- PA Konica Co., Japan; Mitsubishi Kasei Corp.
- SO Jpn. Kokai Tokkyo Koho, 19 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1

PΙ

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| | | | | | |
| | JP 03274054 | A2 | 19911205 | JP 1990-73839 | 19900323 |
| AΤ | JP 1990-73839 | | 19900323 | | |

AB The title compns. contain (a) condensed polymers of phenols with substituents R1-3 with aldehydes, or esters of these polymers with o-naphthoquinonediazide sulfonic acid (R1-2 = H, alkyl, alkoxy, halo; R3 = C≥2-alkyl, alkoxy, cycloalkyl), (b) photoactivated acidor radical generator, (c) o-naphthoquinonediazide compds., (d) Ethyl violet and/or Quinaldine Red, (e) novolak resin, and (f) vinylic copolymers with carboxyl groups. These compns. provide plates with good ink affinity, high resistance to chems., and clear vis. images by exposure.

- L2 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1992:162577 CAPLUS
- DN 116:162577
- TI Photosensitive composition for lithographic plates
- IN Akiyama, Takeo; Adachi, Yutaka; Nakai, Hideyuki; Sasaki, Mitsuru
- PA Konica Co., Japan; Mitsubishi Kasei Corp.
- SO Jpn. Kokai Tokkyo Koho, 18 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|----------|
| | | | | | |
| ΡI | JP 03274053 | A2 | 19911205 | JP 1990-73838 | 19900323 |
| | JP 2922249 | B2 | 19990719 | • | |
| PRAI | JP 1990-73838 | | 19900323 | | |

- AB The title compns. contain (a) condensed polymers of phenols with substituents R1-3 with aldehydes, or esters of these polymers with o-naphthoquinonediazide sulfonic acid (R1-2 = H, alkyl, alkoxy, halo; R3 = C≥2-alkyl, alkoxy, cycloalkyl), (b) photoactivated acidor radical generator, (c) o-naphthoquinonediazide compds., and (d) Ethyl violet and/or Quinaldine Red. These compns. provide plates with good ink affinity, and clear vis. images by exposure.
- L2 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1988:203368 CAPLUS
- DN 108:203368
- TI Photoactivatable time-temperature indicators for low-temperature applications
- AU Bhattacharjee, Himangshu R.
- CS Allied-Signal, Inc., Morristown, NJ, 07960, USA
- SO Journal of Agricultural and Food Chemistry (1988), 36(3), 525-9 CODEN: JAFCAU; ISSN: 0021-8561
- DT Journal
- LA English
- AB A photoactivatable time-temperature indicator based on a leucobase system is described. A leucobase is mixed in a polymeric matrix with a material that generates acid upon exposure to light. Photoexcitation causes the formation of a thermally sensitive, color-forming product. Following this activation step, a progressive color development occurs at a rate that increases with temperature The indicator is useful for monitoring the freshness of perishable products (food, pharmaceuticals, blood, vaccines, paints, photog. film), particularly those stored at subambient temps.
- L2 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1988:91079 CAPLUS
- DN 108:91079
- TI Photoelectric effects in bilayer lipid membrane containing metallo-porphyrins and dyes
- AU Kutnik, Jan; Tien, H. Ti
- CS Dep. Physiol., Michigan State Univ., East Lansing, MI, 48824, USA
- SO Photochemistry and Photobiology (1987), 46(6), 1009-13 CODEN: PHCBAP; ISSN: 0031-8655
- DT Journal
- LA English
- AB The bilayer lipid membrane (BLM) system containing metalloporphyrins [tetraphenylporphyrin (TPP)] and dyes as photosensitizers and electron mediators was studied. Cyclic voltammetry was used to determine photocond. and photo-emf of the system. The largest photocond. was observed for the Mg-TPP-containing BLM with Me viologen (MV2+) and I present in the aqueous solution

Photoactive dyes, due to their redox ability, caused photovoltage up to 30 mV to develop, but no conductance change was observed under illumination in the absence of Mg-TPP. The relevance of cyclic voltammetry to the photoconductance and the photo-emf observed in the BLM is discussed.

- L2 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1985:212702 CAPLUS
- DN 102:212702
- TI Photopolymerizing compositions for photolithography
- PA Sekisui Chemical Co. Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DT Patent LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| | | | | | |
| ΡI | JP 60004940 | A2 | 19850111 | JP 1983-112534 | 19830622 |
| | JP 03013581 | B4 | 19910222 | | |
| PRAI | JP 1983-112534 | | 19830622 | | |

Title compns. are composed of a polymer binder, a photopolymg. monomer or AB oligomer, a photopolymn. initiator(s), an amino-substituted triarylmethane dye, and a photoactive aromatic cyano compound absorbing at a wavelength different from that absorbed by the photopolymn. initiator(s). The color is eliminated by the patternwise irradiation to leave a pattern that can be utilized for reexposure using another pattern, and yet the presence of the remaining pattern does not hinder the reexposure. Thus, a MeCOEt solution 300 containing poly(Me methacrylate) (.hivin.Mw = 2.0 + 105) 60, trimethylolpropane triacrylate 33, benzophenone (absorption maximum 330 nm) 3.5, Michler's ketone (370 nm) 1.5, crystal violet 0.08, and 9,10-dicyanoanthracene (380, 400, 425 nm) 0.02 g was coated on a poly(ethylene terephthalate) film to 50 µm thickness. This layer was laminated on the Cu-laminated surface of a glass fiber-reinforced epoxy resin plate at 160°. The obtained plate was patternwise exposed using UV and developed in 1,1,1-trichloroethane after the poly(ethylene terephthalate) film was released. The developed pattern indicated a high curing rate and showed excellent resolution compared with those for a composition

containing the leuco form of Crystal Violet. A contrast between pale blue in the exposed part and dark blue in the unexposed one before development was sufficiently sharp to inspect the exposure level for multiple exposure. The photobleached part was preserved even 24 h after exposure, convenient for inspection of the development, etching, and film-releasing conditions.

- L2 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN
- AN 1977:520453 CAPLUS
- DN 87:120453
- TI On the photovoltaic effect of organic semiconductor/electrolyte system
- AU Meier, Hans; Albrecht, Wolfgang; Tschirwitz, Ulrich; Zimmerhackl, Erwin; Geheeb, Norbert
- CS Staatl. Forschungsinst. Geochem., Bamberg, Fed. Rep. Ger.
- SO Berichte der Bunsen-Gesellschaft (1977), 81(6), 592-8 CODEN: BBPCAX; ISSN: 0940-483X
- DT Journal
- LA German
- Results obtained with organic-semiconductor photoactive electrodes AB are reported. By immersing an n-type photoconductor (crystal violet [548-62-9], pinacyanol [605-91-4], etc.) or a p-type photoconductor (vanadyl phthalocyanine [13930-88-6], merocyanine A 10 [22698-89-1], etc.) into an electrolyte solution containing reducing or oxidizing agents, photovoltages and anodic or cathodic photocurrents were observed of ≤0.8 V and ≤0.3 mA/cm2, resp., during illumination. An energy conversion of 0.1 to 0.2% referred to the spectrum of a Xenon lamp was obtained. The photoinduced potentials and photocurrents can be explained similarly to inorg. semiconductor photogalvanic cells by the separation of photogenerated hole-electron pairs in a space-charge layer at the electrolyte/organic semiconductor interface combined with an electrochem. charge exchange which includes minority carriers of the photoconductor and reducing or oxidizing agents of the electrolyte. The results point to the possibility of discussing a photoelectrochem. model of the photosynthetic primary process occurring in green plants by using anodic and cathodic working chlorophyll centers.

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492 2390-59-2/RN
                 (2390-59-2 (NOTL) 2390-59-2D)
          4314 548-62-9
            92 548-62-9D
          4249 548-62-9/RN
                 (548-62-9 (NOTL) 548-62-9D )
L3
          4529 2390-59-2/RN OR 548-62-9/RN
=> s 13 and (cancer or tumor or malignan? or angiogen?)
        275614 CANCER
        367540 TUMOR
         77899 MALIGNAN?
         35099 ANGIOGEN?
L4
            46 L3 AND (CANCER OR TUMOR OR MALIGNAN? OR ANGIOGEN?)
=> s l3 (L) (cancer or tumor or malignan?)
        275614 CANCER
        367540 TUMOR
         77899 MALIGNAN?
L5
            15 L3 (L) (CANCER OR TUMOR OR MALIGNAN?)
=> d 1-15 bib abs hitstr
     ANSWER 1 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
L5
AN
     2005:322784 CAPLUS
     142:360888
DN
     Pharmaceuticals containing basic dyes for treatment of tumor and keloid
ΤI
     Kikui, Tomoko; Kikui, Natsuki
IN
PΑ
SO
     Jpn. Kokai Tokkyo Koho, 13 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                       KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
PΙ
     JP 2005097197
                         A2
                                20050414
                                            JP 2003-334217
                                                                   20030925
PRAI JP 2003-334217
                                20030925
     Title pharmaceuticals are useful for treatment of von Recklinghausen's
AB
     disease (neurofibromatosis), etc. Thus, aqueous solution containing 1%
     methylrosaniline chloride was injected and applied for 32 days to ganglion
     in a patient with the disease. The ganglion completely disappeared.
     548-62-9, Methylrosaniline chloride
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (basic dyes for treatment of tumor and keloid in von
        Recklinghausen's disease and neurofibromatosis)
RN
     548-62-9 CAPLUS
     Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-
CN
     cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)
```

● Cl -

L5 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:61993 CAPLUS

DN 141:273646

TI Effect of the lipophilic/hydrophilic character of cationic triarylmethane dyes on their selective phototoxicity toward tumor cells

AU Kandela, I. K.; Lee, W.; Indig, G. L.

CS School of Pharmacy, University of Wisconsin, Madison, WI, 53705-2222, USA

SO Biotechnic & Histochemistry (2003), 78(3/4), 157-169

CODEN: BIHIEU; ISSN: 1052-0295

PB Taylor & Francis Ltd.

DT Journal

AB

LA English

The observation that enhanced mitochondrial transmembrane potential is a prevalent tumor cell phenotype has provided the conceptual basis for the development of mitochondrial targeting as a novel therapeutic strategy for both chemo- and photochemotherapy of neoplastic diseases. Because the plasma transmembrane potential is neg. on the inner side of the cell and the mitochondrial transmembrane potential is neg. on the inner side of this organelle, extensively conjugated cationic mols. (dyes) displaying appropriate structural features are driven electrophoretically through these membranes and tend to accumulate inside energized mitochondria. As a result of the higher mitochondrial transmembrane potential typical of tumor cells, a number of cationic dyes preferentially accrue and are retained for longer periods in the mitochondria of these cells compared to normal cells. This differential in both drug loading and retention brings about the opportunity to attack and destroy tumor cells with a high degree of selectivity. Only a small subset of the cationic dyes known to accumulate in energized mitochondria mediate the destruction of tumor cells with a high degree of selectivity, and the lack of a reliable model to describe the structural determinants of this tumor specificity has prevented mitochondrial targeting from becoming a more reliable therapeutic strategy. We describe here a systematic study of how the mol. structure of closely related cationic triarylmethanes affects the selectivity with which these dyes mediate the photochem. destruction of tumor cells. Based on our observations of how the lipophilic/hydrophilic character of these dyes affects tumor selectivity, we propose a simple model to assist in the design of new drugs tailored specifically for imaging and selective destruction of neoplastic tissue via mitochondrial targeting.

IT 2390-59-2, Ethyl violet

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (effect of lipophilic/hydrophilic character of cationic triarylmethane dyes on their selective phototoxicity toward tumor cells)

RN 2390-59-2 CAPLUS

CN

• cl -

IT 548-62-9, Crystal violet

RL: RCT (Reactant); RACT (Reactant or reagent)

(effect of lipophilic/hydrophilic character of cationic triarylmethane dyes on their selective phototoxicity toward tumor cells)

RN 548-62-9 CAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:686870 CAPLUS

DN 140:213071

TI Crystal violet combined with Merocyanine 540 for the ex vivo purging of hematopoietic stem cell grafts

AU Miyagi, Kiyoko; Sampson, Reynee W.; Sieber-Blum, Maya; Sieber, Fritz

CS Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI, 53226, USA

SO Journal of Photochemistry and Photobiology, B: Biology (2003), 70(3), 133-144

CODEN: JPPBEG; ISSN: 1011-1344

PB Elsevier Science B.V.

DT Journal

LA English

AB The purpose of this study was to determine in a preclin. purging model, how effective crystal violet-mediated photodynamic therapy (CV-PDT) is against solid tumor and drug-resistant mutant tumor cells, and if certain limitations of CV-PDT can be overcome by using crystal violet (CV) in combination with the membrane-active photosensitizer, Merocyanine 540 (MC540). When used under conditions that preserved an adequate fraction of normal human granulocyte/macrophage progenitors (CFU-GM), CV-PDT failed

to achieve meaningful redns. of DU145 prostate, H69 small cell lung cancer, and MDA-MB-435S breast cancer cells. Melphalan-resistant L1210/L-PAM1, adriamycin-resistant P388/ADR, and adriamycin-resistant HL-60/ADR leukemia cells were markedly less sensitive to CV-PDT than their wild-type counterparts, whereas cisplatin-resistant H69/CDDP cells were more sensitive than wild-type H69 cells. Sequential exposure to MC540-and CV-PDT under conditions that preserved an adequate fraction (73% and 29%, resp.) of normal CD34-pos. hematopoietic stem cells and granulocyte/macrophage progenitors was highly effective against H69 (99.997% reduction) and H69/CDDP (99.999% reduction) cells, but ineffective against HL-60/ADR, MDA-MB-435S, and DU145 cells. CV thus shows only limited promise as a single-modality purging agent. However, in certain situations, clin. meaningful tumor cell depletions can be obtained by using CV in combination with a second photosensitizer such as MC540.

IT 548-62-9, Crystal violet

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(crystal violet/merocyanine 540 photosensitizers combination for PDT purging of hematopoietic stem cell grafts in cancer patients)

RN 548-62-9 CAPLUS

CN

Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:371725 CAPLUS

DN 137:259414

TI Effect of molecular structure on the selective phototoxicity of triarylmethane dyes towards tumor cells

AU Kandela, Irawati K.; Bartlett, Jeremy A.; Indig, Guilherme L.

CS University of Wisconsin, School of Pharmacy, Madison, WI, 53705-2222, USA

SO Photochemical & Photobiological Sciences (2002), 1(5), 309-314 CODEN: PPSHCB; ISSN: 1474-905X

PB Royal Society of Chemistry

DT Journal

LA English

AB In response to transmembrane potentials which are neg. on the inner side of both the plasma and mitochondrial membranes, cationic dyes displaying appropriate structural features naturally accumulate in the cytosol and inside the mitochondria. Because enhanced mitochondrial membrane potential is a prevalent tumor cell phenotype, a number of cationic dyes preferentially accrue and are retained for longer periods in the mitochondria of tumor cells as compared to normal cells. The opportunities brought about by this phenomenon in chemo- and photochemotherapy of neoplastic diseases is highlighted by the observation that the phototoxic effects associated with some of the cationic photosensitizers known to accumulate in cell mitochondria are much more

pronounced in tumor cells than in normal cells. However, the structural determinants of selective phototoxicity towards tumor cells are not well understood, and the lack of a robust model to describe the relationship between mol. structure and tumor selectivity has prevented mitochondrial targeting from becoming a more dependable therapeutic strategy. In this report we describe how the lipophilic/hydrophilic character of a series of cationic triarylmethane dyes affects the selectivity with which these photosensitizers mediate the destruction of tumor cells. Our results indicated that only the more hydrophilic triarylmethanes show tumor selectivity, presumably because these are the only dyes capable of staining energized mitochondria with a high degree of specificity. partition of the more lipophilic dyes into a variety of extra-mitochondrial subcellular compartments occurs with comparable efficiencies in tumor and in normal cells, and this less specific subcellular localization precludes tumor selectivity from taking place. 548-62-9

IT

CN

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent);

(mol. structure effect on triarylmethane dyes selective phototoxicity in tumor cells)

548-62-9 CAPLUS RN

> Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

● cl -

IT 2390-59-2

CN

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mol. structure effect on triarylmethane dyes selective phototoxicity in tumor cells)

2390-59-2 CAPLUS RN

● cl -

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:223125 CAPLUS

DN 133:28096

TI Effect of molecular structure on the performance of triarylmethane dyes as therapeutic agents for photochemical purging of autologous bone marrow grafts from residual tumor cells

AU Indig, Guilherme L.; Anderson, Gregory S.; Nichols, Michael G.; Bartlett, Jeremy A.; Mellon, William S.; Sieber, Fritz

CS School of Pharmacy, Division of Pharmaceutical Sciences, University of Wisconsin, Madison, WI, 53706, USA

SO Journal of Pharmaceutical Sciences (2000), 89(1), 88-99 CODEN: JPMSAE; ISSN: 0022-3549

PB Wiley-Liss, Inc.

DT Journal

LA English

Extensively conjugated cationic mols. with appropriate structural features AB naturally accumulate into the mitochondria of living cells, a phenomenon typically more prominent in tumor than in normal cells. Because a variety of tumor cells also retain pertinent cationic structures for longer periods of time compared with normal cells, mitochondrial targeting has been proposed as a selective therapeutic strategy of relevance for both chemotherapy and photochemotherapy of neoplastic diseases. Here we report that the triarylmethane dye crystal violet stains cell mitochondria with efficiency and selectivity, and is a promising candidate for photochemotherapy applications. Crystal violet exhibits pronounced phototoxicity toward L1210 leukemia cells but comparatively small toxic effects toward normal hematopoietic cells (murine granulocyte-macrophage progenitors, CFU-GM). On the basis of a comparative examination of chemical, photochem., and phototoxic properties of crystal violet and other triarylmethane dyes, we have identified interdependencies between mol. structure, and selective phototoxicity toward tumor cells. These structure-activity relationships represent useful guidelines for the development of novel purging protocols to promote selective elimination of residual tumor cells from autologous bone marrow grafts with min. toxicity to normal hematopoietic stem cells.

IT 548-62-9, Crystal violet 2390-59-2

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(mol. structure effect on triarylmethane dyes photochem. purging of autologous bone marrow grafts from residual tumor cells)

RN 548-62-9 CAPLUS

CN

Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-

● cl-

RN 2390-59-2 CAPLUS

CN Ethanaminium, N-[4-[bis[4-(diethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, chloride (9CI) (CA INDEX NAME)

● c1 ~

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:272273 CAPLUS

DN 126:324869

TI A modified and convenient method for assessing tumor cell invasion and migration and its application to screening for inhibitors

AU Saito, Ken-Ichi; Oku, Tohru; Ata, Naomi; Miyashiro, Hirotsugu; Hattori, Masao; Saiki, Ikuo

CS Department of Pathogenic Biochemistry, Research Institute for Wakan-Yaku (Traditional Sino-Japanese Medicines, Toyama Medical and Pharmaceutical University, Toyama, 930-01, Japan

SO Biological & Pharmaceutical Bulletin (1997), 20(4), 345-348 CODEN: BPBLEO; ISSN: 0918-6158

PB Pharmaceutical Society of Japan

DT Journal

LA English

AB In order to screen potent inhibitors of tumor invasion and metastasis, we here devised a simple and reproducible in vitro assay for tumor invasion and migration. A conventional cell-counting assay using a Transwell chamber with a microporous membrane filter is troublesome and time-consuming, involving visually counting the cells under a microscope, and the invaded or migrated cells are sometimes distributed unevenly in predetd. fields on the lower surface of the filter. Therefore, it is

difficult to evaluate the invasive and migratory abilities of tumor cells easily and quant. by the cell counting method. In the present study, crystal violet dye was used for staining the invaded cells and colorimetrically assessing the invasive ability per filter as an absorbance. In this crystal violet assay, tumor cell invasion into a reconstituted basement membrane Matrigel was proportional to both the cell number added into the chamber and the incubation period, and inversely proportional to the amount of Matrigel barrier on the upper surface of filter. The results obtained by this dye-uptake method were highly consistent with those of a conventional cell-counting assay. Using this crystal violet assay, the anti-invasive effect of doxorubicin (DOX) was detected more easily and found to be highly proportional to that by the conventional cell-counting method. We therefore applied this convenient assay method to screen anti-invasive and anti-metastatic compds. As a result, caffeic acid was found to be more active in the inhibition of both tumor cell invasion and migration without showing direct cytotoxicity in vitro than other related compds.

IT 548-62-9, Crystal violet

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (crystal violet staining for tumor cell invasion and
 migration and its application to screening for inhibitors)

RN 548-62-9 CAPLUS

CN

Methanaminium, N-[4-{bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 15 CAPLUS. COPYRIGHT 2006 ACS on STN

AN 1995:720088 CAPLUS

DN 123:196127

TI Comparison of cytotoxic activity assays for tumor necrosis factor

AU Ren, Yuan; Chenm, Hongshan; Ye, Yingwu

CS Natl. Cent. Clin. Lab., Beijing, 100730, Peop. Rep. China

SO Zhonghua Yixue Jianyan Zazhi (1995), 18(2), 89-91 CODEN: CHCCDO; ISSN: 0253-973X

PB Zhonghua Yixuehui

DT Journal

LA Chinese

AB Four determination methods of cytotoxic activity of tumor necrosis factor (TNF) were compared. The results showed that 3-(4,5-dimethylthiazol-2-YL)-2, 5-diphenyltetrazolium bromide (MTT) assay was the least sensitive, neutral red assay, crystal violet assay and 3H-thymidine release assay had similar sensitivity. The sensitivity of neutral red assay was increased by more than 10 fold after treating L929 cells with mitomycin C and 4 + 10 fold more sensitive after treating L929 cells with actinomycin D. Sensitivity of crystal violet assay decreased over 3 fold when the target cell d. increased by 2 fold. When actinomycin D treated target cell d. was 3 + 104 per cell, the crystal violet assay was simple, rapid,

sensitive and stable with detection limit 5.245 pg/mL (a slight decrease in detection limit was observed when the target cell d. was 7.5 + 104 per cell).

IT 548-62-9, Crystal violet

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (in cytotoxic activity assays for tumor necrosis factor)

RN 548-62-9 CAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

● cl -

L5 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1987:400141 CAPLUS

DN 107:141

TI A simple and rapid crystal violet uptake sensitivity test for anticancer agents

AU Fujii, Toshiro; Maeda, Makoto; Kawashima, Yoshiro

CS Sch. Med., Hamamatsu Univ., Hamamatsu, Japan

SO Nippon Sanka Fujinka Gakkai Zasshi (1987), 39(3), 352-8 CODEN: NISFAY; ISSN: 0300-9165

DT Journal

LA Japanese

AB Hitherto, the selection of anticancer drug has been based on clin. experience. However, for chemotherapy to succeed, effective drugs must be selected for individual patients with neoplasia. A method to achieve this is described. Tumor cells obtained by surgery were incubated with anticancer drugs for 48 h at 37° in 5% CO2 in a microplate. After incubation, the surviving cells were fixed with methanol and stained with crystal violet. Then the stained cells were solubilized with 1% lauryl sulfate and the absorbance of each well was measured at 540 nm with a multiscan spectrophotometer. In this method, cytotoxicity was quantitated by the absorbance. The method is simple, rapid (48 h) and reproducible, and it requires only a small amount of cells (5 + 103 - 1 + 104). This method correlates well with sensitivity tests using isotopes. The chemosensitivity of specimens from gynecol. malignancies was examined by this method. The success rate was 77% and higher than with any other in vitro method.

IT 548-62-9, Crystal violet

RL: PROC (Process)

(uptake of, by tumor cells, in antitumor drug sensitivity test)

RN 548-62-9 CAPLUS

● cl -

L5 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1985:608617 CAPLUS

DN 103:208617

TI Chronic toxicity and carcinogenicity studies of gentian violet in mice

AU Littlefield, Neil A.; Blackwell, Boon Nam; Hewitt, Cynthia; Gaylor, David W.

CS Natl. Cent. Toxicol. Res., Food Drug Adm., Jefferson, AR, 72079, USA

SO Fundamental and Applied Toxicology (1985), 5(5), 902-12 CODEN: FAATDF; ISSN: 0272-0590

DT Journal

LA English

A life span dosing study of gentian violet [548-62-9] in the AB diet of 720 males and 720 females of B6C3F1 mice (C57BL/6 + C3H) at dose levels of 0, 100, 300, and 600 ppm was done to determine its toxicity and carcinogenicity. Sacrifices were conducted after 12, 18, and 24 mo of continuous dosing. There was no effect on food consumption or body weight gain; however, a dose effect was noted for mortality rates. Mortality (adjusted for sacrifices) in the controls of both sexes was <15% at 24 mo, but was .apprx.64% in the females and 23% in the males given the high dose. Females appeared to be more susceptible than males. A pos. dose response for hepatocellular carcinoma was noted in males at 24 mo and in females at 18 and 24 mo. Statistical tests for dose-related trends with respect to (1) mortality due to liver neoplasms, (2) prevalence of liver neoplasms, and (3) time to onset of liver neoplasms showed pos. trends in both males and females. Other dose-related toxicol. responses, particularly in the female mice, included erythropoiesis in the spleen, atrophy of the ovaries, adenoma of the Harderian gland, and the presence of type A reticulum cell sarcomas in the urinary bladder, uterus, ovaries, and vagina. The estimation of risk of 10-6 over background for malignant as well as for malignant plus benign liver neoplasm using linear extrapolations showed a lower bound on the virtually safe dose (VSD) to be 2 ppb for the female mice and 1 ppb for the male mice. Thus, gentian violet appears to be a carcinogen in mice at several different organ sites.

L5 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1979:435340 CAPLUS

DN 91:35340

TI Dye solution for identifying cancer cells before neoplasm development and morula stage

IN Barrett, Lucia

PA Fed. Rep. Ger.

SO Ger. Offen., 5 pp. CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

| ΡI | DE 2744645 | A1 | 19790405 | DE 1977-2744645 | 19771004 |
|------|-----------------|----|----------|-----------------|----------|
| | DE 2744645 | B2 | 19800430 | | |
| | DE 2744645 | C3 | 19810115 | | |
| PRAI | DE 1977-2744645 | A | 19771004 | | |

AB A dye mixture for the early detention of tumor cells in peripheral blood consists of 85% EtOH 75 mL, gentian violet 0.5, methyl violet 0.5, hematoxylin 0.35, polychrome methyl blue 0.75, normal methyl blue 2.25, basic fuchsine 10, methyl orange 0.25, Me eosine 0.55 g, and 750 mL water. Drops of blood from a finger are placed on a sterile glass slide, dried, and held briefly at 120°. The slide is flooded with the dye solution and then examined under oil with a microscope to detect cancer cells.

IT 548-62-9

RL: ANST (Analytical study)

(in cancer cells staining in blood, in cancer diagnosis)

RN 548-62-9 CAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

● cl-

L5 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1957:77671 CAPLUS

DN 51:77671

OREF 51:14036c-i,14037a

TI Nutrition of pathological tissues caused by plant viruses

AU Nickell, Louis G.

CS Chas. Pfizer & Co., Brooklyn, NY

SO Annee Biologique (1955), 59, 107-21

CODEN: ANBLAT; ISSN: 0003-5017

DT Journal

LA Unavailable

AΒ cf. C.A. 51, 8914h. Tumors (I) on the sorrel, Rumex acetosa, caused by the virus, Aureogenus magnivena, can be grown indefinitely in culture media. There is ordinarily a lack of tissue organization in the I, and leaf and root formation is very rare. The I have an abnormally high phosphate requirement in culture media, 0.008M KH2PO4, which is 10-100 times the amount usually needed for virus tumors. Nitrate was a better source of N than NH4 salts. N.'s medium Number 24 (cf. C.A. 43, 6288e) was modified as required for growing I. Soluble starch (II) was a better source of C than sucrose, glucose, fructose, or raffinose, though the 4 latter sugars gave good growth of I, and 2% sucrose was ordinarily used in the basal medium. The good utilization of II resulted from an extracellular α -amylase excreted by I. Maximum growth was at 23°; above 25° the growth rate drops rapidly, and long exposure above 25° leads to death of the I. Below 20°, the growth rate drops just as rapidly, but there is no tissue death. After more than 3 months at less than 5°, a normal growth rate resumed upon a return to 23°. The pH optimum was 3.5-6.2, but most expts. were done at

The tissues of I have a green color from chlorophyll (III) which is not photosynthetically effective, since in the absence of a C source the I die rapidly. Growth rates are the same, or even slightly better, in the absence of light, though the tissues are pale owing to lack of III. The effects of physiol. aging of I cultures for subculturing are discussed. Most of the expts. were run for 3 weeks and terminated in the logarithmic phase of growth. In detns. of the effects of different sources of N, K and Ca nitrates were replaced in the medium with the chlorides and L-(or DL-) amino acids (0.002M) were used. Only arginine, aspartic acid (IV), glycine, proline, and threonine could be utilized to a slight extent as N sources. When half the ordinary nitrate concentration was supplemented by the 5 amino acids results were the same. If the concns. of amino acids were increased, only IV gave higher growth values. also the best acid (of those tested) as a C source, though at low-sucrose levels succinic, fumaric, and citric acids could be utilized to some extent. IV appears to be taken up as an intact mol. and may be a limiting factor in protein synthesis. B1 was the only vitamin required for growth. Methylene blue, crystal violet, and malachite green at more than 0.01 p.p.m. inhibited growth of I. Four dyes used as specific stains for nucleic acids (trypan blue, pyronine Y, azure A, and methyl green) stimulated growth of I at 0.01-0.1 p.p.m. Indoleacetic acid (the most effective), β-naphthoxyacetic acid, and 2,4-dichlorophenoxyacetic acid at 0.1-1.0 p.p.m. stimulated respiration (O uptake), and at 0.001-0.1p.p.m. stimulated growth. Triiodobenzoic acid inhibited growth above 0.0001 p.p.m. Maleic hydrazide had a similar inhibitory action. The action of penicillin and streptomycin in promoting growth is discussed. The effects of hydrolyzates and individual components of ribonucleic and deoxyribonucleic acids in stimulating peding growth are described (without quant. data). The most potent inhibitor of growth of I tested was 2,6-diamino-purine, which is lethal at 1 p.p.m. Attempts to reverse the action with adenine were unsuccessful, since adenine itself hinders the growth of I. Sweet clover (Melilotus officinalis) has some advantages (discussed) in the study of virus tumors, which were found to have the same high phosphate requirement as sorrel virus-tumors. 51 references.

IT 548-62-9, Crystal violet
 (effect on plant tumor growth)

RN 548-62-9 CAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

L5 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1955:50266 CAPLUS
DN 49:50266
OREF 49:9796d
TI Cancer-producing action of some dyes. Its importance in alimentary hygiene, therapeutics, and general hygiene. I
AU Truhaut, Rene
SO Ann. Pharm. franc. (1955), 13, 36-51

DT Journal

LA Unavailable

AB A review comprising azo dyes and the following dyes of unclassified composition: carminic acid, Martius Yellow, Solid Green FCF, Guinea Green B, Brilliant Blue FCF, Acid Violet 6B, fuchsin, and crystal violet.

IT 548-62-9, Crystal violet

(cancer from)

RN 548-62-9 CAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

L5 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1953:42252 CAPLUS

DN 47:42252

OREF 47:7108e-g

TI The tumor-inhibitory activity of diaryl- and triarylmethane dyes. I. The Ehrlich ascites mouse tumor

AU Lewis, Margaret Reed; Goland, Philip P.

CS Wistar Inst., Philadelphia, PA

SÓ Cancer Research (1953), 13, 130-6 CODEN: CNREA8; ISSN: 0008-5472

DT Journal

LA Unavailable

The tumor-inhibitory activity of 235 samples of diaryl- and triarylmethane dyes listed under 55 different Color Index nos. was tested by oral administration to mice bearing i.p. growths of Ehrlich ascites mouse tumor. The most active antitumor compds. (Color Index nos. in parentheses) were found to be Auramine (655), Malachite Green (657), Setoglaucine (658) Brilliant Green (662), Fuchsine (677), Fuchsine NB (678), Methyl violet B (680), Crystal Violet (681), Ethyl violet (682), Benzyl Violet (683), Victoria Blue R (728), Victoria Blue B (729) and Night Blue (731). Most of the tumor inhibitors also damaged the host; when their administration was discontinued the animals gained weight but many of them eventually died from tumor; some, however, recovered completely and remained tumor-free. All untreated controls died of the tumor.

IT 548-62-9, Crystal violet

(tumor-inhibitory activity of)

RN 548-62-9 CAPLUS

Cl -

L5 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1951:24570 CAPLUS

DN 45:24570

OREF 45:4312c-d

TI Effect of certain dyes on the growth in vitro of virus tumor tissue from Rumex acetosa

AU Nickell, Louis G.

CS Brooklyn Botanic Garden, Brooklyn, NY

SO Botanical Gazette (Chicago) (1951), 112, 290-3 CODEN: BOGAA5; ISSN: 0006-8071

DT Journal

LA Unavailable

AB cf. C.A. 45, 222e, 2062g, 2067c. Virus tumor tissue from the roots was cultured on media containing various dyes. Methylene blue, crystal violet, and malachite green inhibited growth at concns. above 0.01 p.p.m. Neutral red was inhibitory at 0.1 p.p.m. but trypan blue, pyronin Y, azure A, and methyl green stimulated growth at 0.01 and/or 0.1 p.p.m. The effect of the dyes was not permanent and did not affect the tissue color.

IT 548-62-9, Crystal violet

(effect on virus tumor-tissue from Rumex acetosa)

RN 548-62-9 CAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

L5 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1928:2214 CAPLUS

DN 22:2214 OREF 22:264c

TI Increase in the malignity of cancer grafts in mice by means of gentian

AU Dobrovolskaia-Zavadskaia, N.; Samssonow, N.

Comptes Rendus des Seances de la Societe de Biologie et de Ses Filiales so (1926), 95, 974-6

CODEN: CRSBAW; ISSN: 0037-9026

DT Journal

Unavailable LA

AΒ Unavailable

548-62-9, Gentian violet IT

(increase in malignity of cancer grafts in mice by)

RN 548-62-9 CAPLUS

Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-CN cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

Cl-

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| | ENTRY | SESSION |
| FULL ESTIMATED COST | 140.04 | 140.25 |
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| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -17.25 | -17.25 |
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